



Central Valley Regional Water Quality Control Board

30 August 2024

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San Joaquin & Delta Water Quality Coalition
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APPROVAL OF THE 2025 WATER YEAR MONITORING PLAN UPDATE– SAN JOAQUIN COUNTY AND DELTA WATER QUALITY COALITION

Thank you for timely submittal of the San Joaquin County and Delta Water Quality Coalition's (Coalition) Monitoring Plan Update (MPU) on 1 August 2024, as required by General Order R5-2014-0029-R7. The MPU includes a monitoring frequency and schedule for Core, Represented, TMDL, Delta Regional Monitoring Program, and Management Plan Monitoring for each specific constituent.

Staff determined that the Coalition's proposed schedule includes monitoring of constituents during application periods, or the time when constituents of concern affected water quality in the past, and that the proposed monitoring plan complies with the MRP requirements and the Coalition's monitoring strategy.

The Coalition will submit an MPU addendum by 15 January 2025 to address monitoring results from May through September 2024 that were unavailable during the initial preparation of the MPU.

Based on the attached staff memorandum, I approve the Coalition's Monitoring Plan for the 2025 Water Year. Please review the attached staff memo. Any proposed changes to the MPU must be approved by the Executive Officer prior to implementation.

If you have questions regarding this letter, please contact Chris Jimmerson by email at chris.jimmerson@waterboards.ca.gov.

Sincerely

Adam Laputz 
Digitally signed by Adam Laputz
Date: 2024.08.30 16:06:27 -07'00'
Water Boards

Patrick Pulupa
Executive Officer

Enclosure: Staff Review of MPU

MARK BRADFORD, CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

Central Valley Regional Water Quality Control Board

TO: Sue McConnell
Program Manager
Irrigated Lands Regulatory Program

FROM: Chris Jimmerson
Environmental Scientist
Monitoring and Implementation Unit
Irrigated Lands Regulatory Program

DATE: 28 August 2024

SUBJECT: MONITORING PLAN UPDATE FOR 2025 WATER YEAR – SAN JOAQUIN COUNTY AND DELTA WATER QUALITY COALITION

As required by Order R5-2014-0029-R7 Monitoring and Reporting Program (MRP), the Central Valley Regional Water Quality Control Board (Central Valley Water Board) received a Monitoring Plan Update from the San Joaquin County and Delta Water Quality Coalition (Coalition) on 1 August 2024. The Monitoring Plan Update (MPU) report provides the proposed surface water monitoring schedule for the 2025 Water Year. The Coalition will submit an addendum on 15 January 2025 to address monitoring results from May through September 2024 that were not available at the time of the MPU preparation.

Based on the Order requirements, the Monitoring Plan Update shall identify the appropriate monitoring periods and frequency for all parameters that require testing at each site that is scheduled to be monitored. This includes a discussion of the rationale to support the proposed schedule. Staff reviewed the MPU to determine compliance with requirements pursuant to the Monitoring and Reporting Program. Staff did not identify any monitoring schedule inconsistencies.

The Coalition approached the very complex assessment of monitoring sites and parameters in a systematic and logical way by providing flow charts and discussion facilitating the decision-making process. An overview of the main elements of the proposed monitoring plan is presented below. Staff recommends approval of the Coalition's MPU.

Monitoring Sites, Parameters, Schedule, and Frequency

The monitoring design for the 2025 Water Year includes six Core sites for seven zones in the Coalition region (one Core site represents zones 5 and 6), 17 Represented sites, and one site established for diazinon Total Maximum Daily Load compliance in the Delta. Chlorpyrifos TMDL monitoring was discontinued and officially approved in October 2021, following the ban on chlorpyrifos use. Diazinon monitoring is only scheduled at TMDL river sites, as determined by pesticide use and Pesticide Evaluation Protocol (PEP) results from upstream Core site tributaries. If a Core site requires diazinon monitoring, the Coalition ensures that the monitoring is conducted at the nearest downstream TMDL location.

The MRP requires that the Coalition utilize the PEP process for acquiring specific pesticides for each planned monitoring site, selecting suitable monitoring periods, and providing a rationale for the proposed schedule.

Any PEP flagged constituent on a Core site is scheduled for monitoring. For a flagged constituent at a Represented site, monitoring is scheduled only if the same constituent exceeded trigger limits at a Core site in the previous two years, or if the Represented site is actively managed as part of Management Plan Monitoring (MPM).

The MPU's monitoring schedule is presented in an Excel workbook providing the Zone, site, analyte, and monitoring month. Staff evaluated the schedule for inconsistencies between the worksheets and the Coalition's previously submitted monitoring data and schedules. Staff did not observe any inconsistencies during the review between the worksheets.

1. Core Site Monitoring

Surface water assessment monitoring will be conducted at Core sites per Attachment B, section III.A.1 of the Order. The Coalition is monitoring the second set of Core sites for their first consecutive year. Monitoring includes nutrients, field and general physical parameters, metals, pesticides, and water and sediment toxicity, meeting the requirements in the Order. The MPU's Attachment A lists the monthly monitoring schedule in the water year.

Delta Regional Monitoring Program Trades

The Coalition reviewed monitoring data for water column toxicity to *Pimephales promelas* to consider potential reductions in monitoring efforts, factoring in its contributions to the Delta Regional Monitoring Program (RMP). The Coalition plans to maintain reduced monitoring for water column toxicity to *P. promelas* across all sites.

Pesticides

Consistent with the pesticide evaluation, 34 pesticides will be monitored. Seven new pesticides (acetamiprid, cyprodinil, diazinon, dichlorvos, metconazole, simazine, tebuconazole) are added to the monitoring schedule and nine pesticides (cinerin-1, cinerin-2, ethalfluralin, jasmolin-1, jasmolin-2, paraquat, pyrethrin-1, pyrethrin-2,

chlorpyrifos) are discontinued from the previous monitoring year because these did not meet the monitoring criteria established by the approved PEP monitoring strategy. The Coalition documented the reason for removal from the monitoring schedule in the MPU's Attachment B, PEP.

Since approximately 50% of the scheduled pesticides do not have water quality trigger limits, the Central Valley Water Board will need to develop trigger limits per the Order:

“Trigger limits will be developed by the Central Valley Water Board staff through a process involving coordination with the Department of Pesticide Regulation (for pesticides) and stakeholder input. The trigger limits will be designed to implement narrative Basin Plan objectives and to protect applicable beneficial uses. The Executive Officer will make a final determination as to the appropriate trigger limits.”

Although water quality trigger limits may not be available yet, the Coalition will continue to monitor all the pesticides in the schedule and report results in its Annual Report.

Staff conducted a thorough review of implementation of the PEP steps and concurs with proposed pesticides monitoring.

Metals: To identify the metals monitoring frequency and schedule, the Coalition followed an evaluation process shown in Figure 3 of the MPU, which considers previous monitoring results, pesticide use information, geologic conditions, and Basin Plan requirements satisfying the Order's requirements. Staff reviewed the Coalition's decision process and concurred with their metals monitoring plan.

Aquatic and Sediment Toxicity: The Coalition's surface water monitoring includes monthly water column toxicity monitoring on four test species (*C. dubia*, *S. capricornutum*, *H. azteca*). *P. promelas* monitoring is traded to support the approved Delta RMP. The Coalition also proposes to sample sediment toxicity to *Hyalella azteca* twice a year, once during the irrigation season (March – October) and once during storm season (March – April) as required. Additional sediment chemistry analyses for chlorpyrifos, piperonyl butoxide and pyrethroids is added on sediment samples as needed. The Coalition also will include water column *Hyalella azteca* toxicity testing at all Core sites and some Represented sites where historical pyrethroid monitoring data indicates a concern.

2. Represented Site Monitoring

MRP Attachment B, Section III.C.2 states, *“...monitoring periods shall be determined utilizing previous monitoring results, knowledge of agricultural use patterns (if applicable), pesticide use trends, chemical characteristics, and other applicable criteria.”* The proposed represented monitoring schedule complies with this section based on a) previous water quality trigger limit exceedances, b) analyzing pesticide use, and c) scheduling monitoring events when management plans are already in place at the representative Core site.

3. Management Plan Monitoring

By comparing historical monitoring data to the monitoring schedule, staff concurs with the management plan monitoring schedule.

4. TMDL Monitoring

The Coalition discontinued chlorpyrifos monitoring in the Delta and tributary sites per an October 2021 Executive Officer approval. Per the October 2021 approval, the Coalition will discontinue diazinon monitoring at the TMDL capacity and allocation sites per the PEP selection process for diazinon monitoring in the upstream tributary areas. TMDL diazinon monitoring will occur at one TMDL site this Water Year.

Agriculture has been identified as a contributing source to low dissolved oxygen (DO) in the Stockton Deep Water Ship Channel. The Coalition will continue to review DO monitoring results in the Stockton Deep Water Ship Channel gathered from the California Data Exchange Center, Rough and Ready Island station, and from within its tributaries to assess compliance with the DO water quality objectives required in the TMDL.

Pyrethroid Control Program

The Coalition's monitoring schedule complies with the Pyrethroid Control Program monitoring through continued Trend monitoring and water column *H. azteca* monitoring.

5. 303(d) Constituents

The MRP requires monitoring of 303(d) listed constituents if irrigated agriculture is a contributing source and if monitoring is requested by the Executive Officer. The Executive Officer is not requesting additional 303(d) monitoring beyond the current schedule of 303(d) constituents found in the Core and Representative monitoring.

Staff Summary

- During preparation of the MPU review, staff reviewed the monitoring schedule and found no monitoring inconsistencies.
- An MPU addendum will be submitted by 15 January 2025 to address monitoring results from May through September 2024 that were not available at the time the MPU was prepared. Those results may require revisions to the monitoring schedule, as part of the pesticide evaluation.
- The Central Valley Water Board will need to develop trigger limits in coordination with the Department of Pesticide Regulation and input from stakeholders for those pesticides without a water quality trigger limit.
- The Central Valley Water Board will need to have laboratories develop analyte methods in coordination with Environmental Laboratory Accreditation Program (ELAP) and input from stakeholders for those pesticides without an analyte method.